MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2015 / 2016 SESSION

DOM5018 – OPERATIONS MANAGEMENT

(For Diploma Students Only)

03 JUNE 2016
3.00 p.m – 5.00 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **8** pages with **3** sections.
2. Answer **ALL** questions.
3. Answers for section A and B should be shaded on the OMR sheet provided.
4. For section C, please write your answers in the answer booklet provided.

SECTION A: MULTIPLE CHOICE QUESTIONS (each question carries 1 mark). Answers for this section should be shaded on the OMR sheet.

1. Which of the following is true about business strategies?
   A. An organization should stick with its strategy for the life of the business.
   B. Well defined missions make strategy development much easier.
   C. All firms within an industry will adopt the same strategy.
   D. Strategies are formulated independently of SWOT analysis.

2. Which of the following activities takes place most immediately once the mission has been developed?
   A. The functional areas develop their supporting missions.
   B. The firm develops alternative or back-up missions in case the original mission fails.
   C. The functional areas develop their functional area strategies.
   D. The ten OM decision areas are prioritised.

3. Which of the following strategic concepts allow firms to achieve competitive advantage?
   A. productivity, efficiency, and quality leadership
   B. differentiation, cost leadership, and quick response
   C. differentiation, quality leadership, and quick response
   D. distinctive competency, cost leadership, and experience

4. Which of the following statements best characterises delivery reliability?
   A. A company that always delivers at the promised time.
   B. A company that always delivers on the same day of the week.
   C. A company that delivers faster than its competitors.
   D. A company that has a computerised delivery scheduling system.

5. Which of the global operations strategies uses exports and licensing of existing products?
   A. Global strategy
   B. International strategy
   C. Transnational strategy
   D. Multi-domestic strategy

6. Forecasts are usually classified by time horizon into three categories, which are_____.
   A. exponential smoothing, regression, and time series
   B. strategic, tactical, and operational
   C. short-range, medium-range, and long-range
   D. finance/accounting, marketing, and operations

Continued.....

7. What are the three major types of forecasts that organisations use?
   A. strategic, tactical, and operational
   B. exponential smoothing, Delphi, and regression
   C. economic, technological, and demand
   D. causal, time-series, and seasonal

8. Which of the following is not a step in the forecasting process?
   A. Determine the time horizon.
   B. Select forecasting model.
   C. Determine the use of the forecast.
   D. Eliminate any assumptions.

9. Which of the two general approaches below are used in forecasting?
   A. judgmental and qualitative
   B. historical and associative
   C. qualitative and quantitative
   D. mathematical and statistical

10. Which of the following uses three types of participants: decision makers, staff personnel, and respondents?
   A. executive opinions
   B. sales force composites
   C. time series analysis
   D. the Delphi method

11. A product's life cycle is divided into four stages. Which of the stages below follow the correct order?
   A. introduction, maturity, growth, and saturation
   B. introduction, growth, stability, and decline
   C. introduction, growth, maturity, and decline
   D. introduction, maturity, saturation, and decline

12. Which one of the activities below is used for reducing the complexity of a product and improving a product's maintainability?
   A. Product Lifecycle Management (PLM)
   B. Product-by-value-analysis
   C. Manufacturability and value engineering
   D. Organising for product development

13. Which of the following is **TRUE** regarding computer-aided design?
   A. It is too expensive to use in most manufacturing and design settings.
   B. It is an old technology.
   C. It results in longer development cycles for virtually all products.
   D. It is the use of computers to interactively design products and prepare engineering documentation.

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14. Which of the following are ethical in producing environmentally-friendly products?
    I) using less materials
    II) more recycled materials
    III) using more energy
    IV) using less harmful ingredients

    A. I, II, and III
    B. I, II, and IV
    C. I, III, and IV
    D. II, III, and IV

15. Which of the following document shows in schematic form how a product is assembled?
    A. an engineering drawing
    B. an assembly routing
    C. an assembly chart
    D. a route sheet

16. Which of the following is **NOT** a concern of the supply chain?
    A. maintenance scheduling
    B. warehousing and inventory levels
    C. credit and cash transfers
    D. suppliers

17. Which one of the following is **NOT** a supply-chain strategy?
    A. negotiation with many suppliers
    B. short-term relationships with few suppliers
    C. vertical integration
    D. keiretsu

18. Which of the following are the three types of negotiation strategies?
    A. vendor evaluation, vendor development, and vendor selection
    B. Theory X, Theory Y, and Theory Z
    C. cost-based price model, market-based price model, and competitive bidding
    D. many suppliers, few suppliers, and keiretsu

19. An advantage of a joint venture over vertical integration is _____.
    A. reduced costs
    B. compromised competitive advantages
    C. globalisation
    D. reduced risk

Continued.....

20. Which of the following statement best describes vertical integration?
    A. To produce goods or services previously purchased.
    B. To sell products to a supplier or a distributor.
    C. To develop the ability to produce products which complement the original product.
    D. To develop the ability to produce the specified good more efficiently than before.

[TOTAL 20 MARKS]

SECTION B: TRUE/FALSE QUESTIONS (each question consists of 1 mark).
Answers for this section should be shaded on the OMR sheet.
Mark "A" for the TRUE statement and "B" for the FALSE statement.

21. The assembly line is an example of a repetitive process.

22. The four basic types of process strategies are process focus, repetitive focus, product focus, and mass customisation.

23. A product-focused process is commonly used to produce low-volume, high-variety products.

24. Capacity is the number of units a facility can hold, receive, store, or produce in a period of time.

25. The objective of the location decision made by operations manager is to maximise the firm's profit.

26. For a location decision, labor productivity may be important in isolation, but low wage rates are a more important criterion.

27. Operations managers will need to consider ethical and social responsibility issues when location decisions involve child labor issues and corruption.

28. Tangible and intangible costs are one of the factors that operations managers need to take count as it will affect the location decisions.

29. The goal of a human resource strategy is to manage labor and design jobs so people are effectively and efficiently utilised.

30. The two extremes of employment stability policy are "follow demand exactly" and "keep demand constant."

31. The main characteristics of jobs are skill variety and job significance.

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32. Self-directed teams tend to be successful in work environments due to less employee empowerment.

33. A major challenge for operations manager in inventory management is to maintain a balance between inventory investment and customer service.

34. Record accuracy helps operations managers to make precise decisions about ordering, scheduling, and shipping.

35. The EOQ model is best suited for items whose demand is dependent on other products.

36. Cycle counting allows causes of errors to be identified and also trained personnel audit inventory accuracy.

37. Preventive maintenance is nothing more than keeping the equipment and machinery running.

38. Maintenance is all activities involved in keeping a system's equipment in working order.

39. Managers who implementing reward system and employee empowerment will helps organisation to improve its quality.

40. Breakdown maintenance is a routine inspection and servicing to keep facilities in good repair.

[TOTAL 20 MARKS]

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SECTION C: STRUCTURED QUESTIONS

Answer ALL questions. Answers should be written on the answer booklet provided.

QUESTION 1

(a) Operations management (OM) is a set of activities that create value by transforming inputs into outputs that applies to all industries such as banking, food & beverages, manufacturing, and production.

i) Identify **THREE (3)** reasons for studying operations management. (3 marks)

ii) Explain **TWO (2)** differences between goods and services. (Explain with **ONE** example for each differences) (4 marks)

(b) D'NAZ Bakery is currently producing 150 cakes a day. The bakery spent a total of 10 hours to produce at this quantity.

i) Using the single factor productivity measurement, what is the productivity level of D'NAZ Bakery? (3 marks)

ii) D'NAZ Bakery is planning to send its employees for training with an aim of increasing its productivity to 200 cakes a day. What is the new productivity level of D'NAZ Bakery if labour-hours spent are still the same? (3 marks)

iii) What is the rate of increase in productivity (before and after training)? (2 marks)
(State your answer in THREE (3) decimal points)

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QUESTION 2

(a) Just-in-time (JIT) partnership exists when a supplier and a purchaser work together with an open communication to remove waste and drive down costs for mutual benefits.

i) Identify **FOUR (4)** specific goals of JIT partnerships. (4 marks)

ii) Define Just-in-time (JIT). (1 mark)

(b) Marioblanc Electronics produces short runs of printers that are transported to distributors. You have been asked by the owner, Mario Larry, to reduce inventory by introducing a kanban system. The following data have been provided:-

Daily demand	250 units
Production lead time	½ day
Safety stock	¼ day
Kanban size	50 units

i) How many kanbans are needed? (8 marks)
(state your answer in TWO (2) decimal points)

ii) What are the **TWO (2)** advantages of kanban? (2 marks)

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QUESTION 3

Futuristic Enterprise is an electronic company that produces handheld electronic devices. Currently, the company is using fixed-position layout. Darvin informed Mr. Jimmy that the company has to change their current layout as the assembly section of this company is considered as inefficient due to high number of processes and employees. These leads to quality problem. However, Mr. Jimmy, as an operations manager, did not listen to his opinion.

(a) Suggest **FOUR (4)** strategic importance of layout decisions for Darvin to advice Mr. Jimmy. (8 marks)

(b) What types of layout that can be used by Futuristic Enterprise to overcome their quality problem? (4 marks)

(c) What are the **THREE (3)** advantages of a work cell layout? (3 marks)

QUESTION 4

Felda Hot Spring Chalet is one of the top-10 attractive place for tourists in North Malaysia. However, for the past two months, Mr. Bakri (Felda Hot Spring Chalet's manager) have been receiving many complaints on cleanliness and numbers of customers were getting lesser.

a) How does a circular model help Mr. Bakri to have continuous improvement? Explain for each stages. (8 marks)

b) What are the tools that can be used by Felda Hot Spring Chalet for generating ideas, organize the collected data, and identifying problems to improve on their quality management? (7 marks)

[TOTAL 60 MARKS]

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